

U.S. Patent Application Serial No. 10/658,209
Amendment dated February 12, 2009
Reply to Office Action mailed September 29, 2008

AMENDMENTS TO THE CLAIMS:

Claims 1 - 5 (canceled)

6. (previously presented) A method of annunciating a patient's medical data levels using a medical data level monitoring device comprising the steps of:

 storing medical data levels with the corresponding dates and times of day the respective medical data levels were taken;

 calculating an average medical data level from at least a first medical data level and a second medical data level selected from the stored medical data levels;

 annunciating said average medical data level;

 receiving a first user input to annunciate said first medical data level;

 annunciating said first medical data level;

 receiving a second user input to annunciate said second medical data level; and

 annunciating said second medical data level;

 wherein the average medical data level calculation uses n of said stored medical data levels, where n is an integer greater than 2 and said n stored medical data levels are constituent values that comprise said first medical data level and said second medical data level;

 wherein said average medical data level and said constituent values are displayed on a display screen, the display screen comprising a first area for displaying one of the average medical data level and said constituent values, and a second area configured to have n indicators corresponding to respective ones of said n stored medical data levels; and

 further comprising the step of annunciating a variability indicator that indicates the variability between said n stored medical data levels.

7. (original) A method as claimed in claim 6, wherein said variability indicator is at least one of a scalar value, and a statistical parameter selected from the group consisting of a standard deviation and a coefficient of variance.

Claims 8 - 14 (canceled)

15. (previously presented) A method as claimed in claim 16, wherein said selected number of days is three.

16. (previously presented) A method of annunciating a patient's medical data levels using a medical data level monitoring device comprising the steps of:

storing medical data levels with the corresponding dates and times of day the respective medical data levels were taken;

calculating an average medical data level from at least a first medical data level and a second medical data level selected from the stored medical data levels;

annunciating said average medical data level;

receiving a first user input to annunciate said first medical data level;

annunciating said first medical data level;

receiving a second user input to annunciate said second medical data level; and
annunciating said second medical data level;

wherein said calculating step further comprises the steps of

selecting the stored medical data levels used to determine said average medical data level based on the date and time of day the stored medical data levels were taken;

defining a time period during a day when the average medical data level is desired for that time period on each of a selected number of days;

receiving a user input requesting an average medical data level of said time period for a selected number of days beginning with the current day;

determining if said time period has been entered or passed on said current day;

using a reading of an medical data level taken during the time period for said current day when determining said average medical data level if said time period has been entered or has passed for the current day; and

selecting a stored medical data level taken on the previous day when determining said average medical data level if said time period has yet not been entered or passed for the current day.

17. (original) A method as claimed in claim 16, wherein said using step further comprises the step of selecting one of the earliest and the most recent of a plurality of readings taken on said current day during said time period based on their respective times of day.

18. (original) A method as claimed in claim 16, wherein said selecting step further comprises the step of selecting one of the earliest and the most recent of a plurality of readings taken on said previous day during said time period based on their respective times of day.

19. (original) A method as claimed in claim 16, wherein said using step further comprises the step of using a stored medical data level from the previous day if no valid medical data levels are available from said time period for the current day, and said selecting step further comprises the step of using a stored medical data level from the day before said previous day if no valid medical data levels are available from said time period for the previous day.

20. (original) A method as claimed in claim 16, wherein said calculating step further comprises the step of using stored medical data levels from as many as a selected maximum number of previous days if no valid medical data levels are available for said current day.

21. (original) A method as claimed in claim 20, wherein said selected maximum number of days is five.

Claims 22 – 26 (canceled)

27. (previously presented) An apparatus for patient condition monitoring comprising:
a reader for measuring a selected medical data level for said patient;
a memory device for storing a plurality of the medical data levels along with their
respective dates and time of day they were taken;
an annunciator;
a user input device; and
a processing device connected to said reader, said memory device, said annunciator
and said user input device and programmed to calculate an average medical data level from at
least a first medical data level and a second medical data level selected from the stored
medical data levels in said memory device, to annunciate the average medical data level via
said annunciator, to receive a first user input from said user input device to annunciate the
first medical data level, to annunciate the first medical data level in response to said first user
input, to receive a second user input from said user input device to annunciate the second
medical data level, and to annunciate the second medical data level in response to said second
user input;
wherein said processing device is programmed to use n of the stored medical data
levels to calculate the average medical data level, where n is an integer greater than 2 and the
 n stored medical data levels comprise said first medical data level and said second medical
data level;
wherein said annunciator is a display screen and the average medical data level and
the constituent values are displayed on said display screen, said display screen comprising a
first area for displaying one of the average medical data level and the constituent values, and a
second area configured to have n indicators corresponding to respective ones of the n medical
data levels;
wherein said processing device is programmed to determine and annunciate a
variability indicator via said annunciator that indicates the variability between the n stored
medical data levels.

28. (original) An apparatus as claimed in claim 27, wherein the variability indicator is at least one of a scalar value, and a statistical parameter selected from the group consisting of a standard deviation and a coefficient of variance.

Claims 29 – 34 (canceled)

35. (previously presented) An apparatus for patient condition monitoring comprising:
a reader for measuring a selected medical data level for said patient;
a memory device for storing a plurality of the medical data levels along with their respective dates and time of day they were taken;
an annunciator;
a user input device; and
a processing device connected to said reader, said memory device, said annunciator and said user input device and programmable to calculate an average medical data level from at least a first medical data level and a second medical data level selected from the stored medical data levels in said memory device, to annunciate the average medical data level via said annunciator, to receive a first user input from said user input device to annunciate the first medical data level, to annunciate the first medical data level in response to said first user input, to receive a second user input from said user input device to annunciate the second medical data level, and to annunciate the second medical data level in response to said second user input;

wherein said processing device is programmed to select the stored medical data levels used to determine said average medical data level based on the date and time of day the stored medical data levels were taken;

wherein said processing device is operable to generate prompts via said annunciator to allow a user to define via said user input device a time period during a day when the average medical data level is desired for that time period on each of a selected number of days;

wherein said processing device is further programmed to receive a user input requesting an average medical data level of said time period for a selected number of days beginning with the current day, to determine if said time period has been entered or passed on said current day, to use a reading of an medical data level taken during the time period for said current day when determining the average medical data level if said time period has been entered or has passed for the current day, and to select a stored medical data level taken on the previous day when determining the average medical data level if said time period has yet not been entered or passed for the current day.

36. (original) An apparatus as claimed in claim 35, wherein said selected number of days is three.

37. (canceled)

38. (previously presented) An apparatus as claimed in claim 35, wherein said processing device is programmable to select one of the earliest and the most recent of a plurality of readings taken on said current day during said time period based on their respective times of day.

39. (previously presented) An apparatus as claimed in claim 35, wherein said processing device is programmable to select one of the earliest and the most recent of a plurality of readings taken on said previous day during said time period based on their respective times of day.

40. (previously presented) An apparatus as claimed in claim 35, wherein said processing device is programmable to use a stored medical data level from the previous day if no valid medical data levels are available from said time period for the current day, and, when selecting a stored medical data level taken on the previous day, to use a stored medical data

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level from the day before said previous day if no valid medical data levels are available from said time period for the previous day.

41. (previously presented) An apparatus as claimed in claim 35, wherein said processing device is programmable to use stored medical data levels from as many as a selected maximum number of previous ago if no valid medical data levels are available for said current day.

42. (original) An apparatus as claimed in claim 41, wherein said selected maximum number of days is five.

43. (currently amended) An apparatus for patient condition monitoring comprising:
a reader for measuring a selected medical data level for said patient;
a memory device for storing a plurality of the medical data levels along with their
respective dates and time of day they were taken;
an annunciator;
a user input device; and
a processing device connected to said reader, said memory device, said annunciator
and said user input device and programmed to calculate an average medical data level from at
least a first medical data level and a second medical data level selected from the stored
medical data levels in said memory device, to annunciate the average medical data level via
said annunciator, to receive a first user input from said user input device to annunciate the
first medical data level, to annunciate the first medical data level in response to said first user
input, to receive a second user input from said user input device to annunciate the second
medical data level, and to annunciate the second medical data level in response to said second
user input;
wherein said processing device is programmed to use n of the stored medical data
levels to calculate the average medical data level, where n is an integer greater than 2 and the

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n stored medical data levels are constituent values of said average medical data level that comprise said first medical data level and said second medical data level;

wherein, when said annunciator is a display screen and the average medical data level and the constituent values are annunciated using said display screen, said display screen comprises a first area for displaying one of the average medical data level and the constituent values, and a second area configured to simultaneously display n indicators corresponding to respective ones of the constituent values with the n indicator corresponding to a currently displayed one of said constituent values being displayed differently from the other said n indicators; and

~~An apparatus as claimed in claim 22, wherein said user input device comprises forward and backward arrow keys for navigation forward and backward, respectively, among the annunciated said constituent values.~~

Claim 44 - 52 (canceled)

53. (previously presented) A method as claimed in claim 54, wherein said selected number of days is three.

54. (previously presented) A method of displaying blood glucose levels using a blood glucose meter comprising the steps of:

storing blood glucose levels with the corresponding dates and times of day the respective blood glucose levels were taken;

calculating an average blood glucose level from at least a three of the stored blood glucose levels as the constituent values;

displaying the average blood glucose level using a display device of said blood glucose meter;

receiving a first user input to display a first one of the constituent values;

displaying the first one of the constituent values in response to the first user input;

receiving a second user input to display a second one of the constituent values; and

displaying the second one of the constituent values in response to the second user input;

wherein said calculating step further comprises the steps of

defining a time period during a day when the average blood glucose level is desired for that time period on each of a selected number of days;

receiving a user input requesting an average blood glucose level of said time period for a selected number of days beginning with the current day;

determining if said time period has been entered or passed on said current day;

using a reading of an blood glucose level taken during the time period for said current day when determining the average blood glucose level if said time period has been entered or has passed for the current day; and

selecting a stored blood glucose level taken on the previous day when determining the average blood glucose level if said time period has yet not been entered or passed for the current day.

55. (original) A method as claimed in claim 54, wherein said using step further comprises the step of selecting one of the earliest and the most recent of a plurality of readings taken on said current day during said time period based on their respective times of day.

56. (original) A method as claimed in claim 54, wherein said selecting step further comprises the step of selecting one of the earliest and the most recent of a plurality of readings taken on said previous day during said time period based on their respective times of day.

57. (original) A method as claimed in claim 54, wherein said using step further comprises the step of using a stored blood glucose level from the previous day if no valid blood glucose levels are available from said time period for the current day, and said selecting step further

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comprises the step of using a stored blood glucose level from the day before said previous day if no valid blood glucose levels are available from said time period for the previous day.

58. (original) A method as claimed in claim 54, wherein said calculating step further comprises the step of using stored blood glucose levels from as many as a selected maximum number of previous days if no valid blood glucose levels are available for said current day.

59. (original) A method as claimed in claim 58, wherein said selected maximum number of days is five.

60. (previously presented) A method of displaying blood glucose levels using a blood glucose meter comprising the steps of:

storing blood glucose levels with the corresponding dates and times of day the respective blood glucose levels were taken;

calculating an average blood glucose level from at least a three of the stored blood glucose levels as the constituent values;

displaying the average blood glucose level using a display device of said blood glucose meter; and

displaying the constituent values at least one of substantially simultaneously with said average blood glucose level, and after the average blood glucose level using sequential display screens for respective ones of the average blood glucose level and the constituent values that can be generated in a round robin manner;

wherein said calculating step comprises the steps of

selecting the stored blood glucose levels used to determine said average blood glucose level based on the date and time of day the stored blood glucose levels were taken;

defining a time period during a day when the average blood glucose level is desired for that time period on each of a selected number of days;

receiving a user input requesting an average blood glucose level of said time period for a selected number of days beginning with the current day;

determining if said time period has been entered or passed on said current day;

using a reading of an blood glucose level taken during the time period for said current day when determining the average blood glucose level if said time period has been entered or has passed for the current day; and

selecting a stored blood glucose level taken on the previous day when determining the average blood glucose level if said time period has yet not been entered or passed for the current day.

61. (original) A method as claimed in claim 60, further comprising the step of displaying a variability indicator that indicates the variability between said constituent blood glucose levels.

62. (original) A method as claimed in claim 61, wherein the variability indicator is at least one of a scalar value, and a statistical parameter selected from the group consisting of a standard deviation and a coefficient of variance.

63. (canceled)

64. (canceled)

65. (previously presented) A method as claimed in claim 60, wherein said selected number of days is three.

66. (canceled)

67. (previously presented) A method as claimed in claim 60, wherein said using step further comprises the step of selecting one of the earliest and the most recent of a plurality of readings taken on said current day during said time period based on their respective times of day.

68. (previously presented) A method as claimed in claim 60, wherein said selecting step further comprises the step of selecting one of the earliest and the most recent of a plurality of readings taken on said previous day during said time period based on their respective times of day.

69. (previously presented) A method as claimed in claim 60, wherein said using step further comprises the step of using a stored blood glucose level from the previous day if no valid blood glucose levels are available from said time period for the current day, and said selecting step further comprises the step of using a stored blood glucose level from the day before said previous day if no valid blood glucose levels are available from said time period for the previous day.

70. (canceled)

71. (canceled)